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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,450	01/09/2004	Shoji Mafune	OMRNP072	8003
22434	7590	09/30/2005	EXAMINER	
BEYER WEAVER & THOMAS LLP			AU, SCOTT D	
P.O. BOX 70250			ART UNIT	
OAKLAND, CA 94612-0250			PAPER NUMBER	
			2635	

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

uK

<b>Office Action Summary</b>	Application No. 10/754,450	Applicant(s) MAFUNE ET AL.	
	Examiner Scott Au	Art Unit 2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,4,11-14 and 18 is/are allowed.
- 6) ☒ Claim(s) 1-25-10 and 15-16 is/are rejected.
- 7) ☒ Claim(s) 17 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

The application of Mafune et al. for a "Detector and lock controller using same" filed January 9, 2004 has been examined.

Claims 1-19 are pending.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 5-10, 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heide et al. (US# 6,946,949) in view of Kulha et al. (US# 5,973,611).

Referring to claims 1 and 5, Heide et al. disclose a detector (20) (i.e. (i.e. receiving and transmitting unit) for detecting a target object approaching inside detection areas (col. 1 lines 37-53 and col. 10 lines 57-65), said detector comprising: a wave outputting device (20) (i.e. (i.e. receiving and transmitting unit) for outputting waves at a specified transmission timing (col. 10 lines 57-65); a transmission antenna (24) (i.e. transceiving antenna) for transmitting transmission waves outputted by said wave outputting device as electromagnetic waves into space; a reception antenna (24) (i.e. transceiving antenna) for receiving the electromagnetic waves transmitted from

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said transmission antenna and reflected from said target object (col. 3 lines 1-46; see Figures 2-3); a plurality of wave detection circuit parts (21, 22, 23,24) (i.e. detecting circuit parts) for mixing wave detection signals corresponding to said transmission waves with signals received by said reception antenna (24) (i.e. transceiving antenna) at different sampling timings and outputting the mixed signals; and a plurality of judging circuit parts (25,271) (i.e. evaluating circuit parts) each corresponding to different one of said wave detection circuit parts (col. 5 lines 1-34); wherein said detection areas have different sizes for each of said judging circuit parts corresponding in order to said different sampling timings of said wave detection circuit parts (col. 1 lines 36-50).

However, Heide et al. did not explicitly disclose the judging circuitry serving to switch on a detection output based on the outputted signals from said wave detection circuit parts to indicate that said target object is approaching.

In the same field of endeavor of vehicle security system, Kulha et al. disclose the judging circuitry (20) (i.e. sensors) serving to switch on a detection output based on the outputted signals from said wave detection circuit parts to indicate that said target object is approaching (col. 3 lines 17-33).

One ordinary skill in the art understands that once sensor 20 senses and detects of the approaching object, waking up the transmitter for transmitting signal to the FOB 14 of Kulha et al. is desirable in the security system of Heide et al. because Heide et al. suggest the evaluating circuit (25, 271) for judging the received from the detecting signal (col. 5 lines 1-9) and Kulha et al suggest different zones and upon sensing an

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object with one of a plurality of the wake-up sensors 20, the microprocessor 16 transmits wake-up information and data, via transmitter 24 and antenna 26 to the fob transceiver 14. The transmitter 24 transmits the wake-up and data signals sequentially from different zones about the vehicle to determine the location of the fob transceiver 14 (col. 3 lines 17-30). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made, to include the judging circuitry serving to switch on a detection output based on the outputted signals from said wave detection circuit parts to indicate that said target object is approaching of Kulha et al. in the security system of Heide et al. with the motivation for doing so would prevent theft from approaching the vehicle.

Referring to claims 2 and 6, Heide et al. in view of Kulha et al. disclose the detector of claims 1 and 5, Kulha et al. disclose which is provided to a structure with a lockable part having a handle and being adapted to open and close, said target object being a hand of a user approaching said handle (col. 4 lines 33-49).

Referring to claim 7, Heide et al. in view of Kulha et al. disclose a lock controller comprising a detector of claim 2, Kulha et al. disclose the main apparatus which is provided to a structure with a lockable part having a handle and being adapted to open and close, wherein said main apparatus is adapted to send by wireless transmission a specified request signal to a portable device carried by said user if a detection output corresponding to a specified one of said detection areas of said detector is switched on

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while said structured is locked, said specified one being not the smallest of said detection areas, to receive an answer signal from said portable device in response to said request signal, and to cause said lockable part to be unlocked after ascertaining that specified conditions for unlocking are satisfied, said specified conditions including condition that said received answer signal be a correct signal (col. 5 line 35 to col. 6 line 18).

Referring to claim 8, Heide et al. in view of Kulha et al. disclose a lock controller comprising a detector of claim 7, Kulha et al. disclose wherein said specified conditions also include another condition that the detection output corresponding to another detection area smaller than said one detection area be switched on after the detection output corresponding to said specified detection area is switched on (col. 4 lines 12-32).

Referring to claim 9, Heide et al. in view of Kulha et al. disclose a lock controller comprising a detector of claim 7, Kulha et al. disclose wherein said main apparatus is adapted to send by wireless transmission another specified request signal to said portable device carried by said user if a detection output corresponding to a detection area smaller than said one detection area of said detector is switched on while said structured is unlocked, to receive an answer signal from said portable device in response to said request signal, and to cause said structure to be locked after

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ascertaining that said received answer signal is a correct signal (col. 5 line 35 to col. 6 line 18).

Referring to claim 10, Heide et al. in view of Kulha et al. disclose a lock controller comprising a detector of claim 8, Kulha et al. disclose wherein said main apparatus is adapted to send by wireless transmission another specified request signal to said portable device carried by said user if a detection output corresponding to a detection area smaller than said one detection area of said detector is switched on while said structured is unlocked, to receive an answer signal from said portable device in response to said request signal, and to cause said structure to be locked after ascertaining that said received answer signal is a correct signal (col. 5 line 35 to col. 6 line 18).

Referring to claim 15, Heide et al. in view of Kulha et al. disclose a lock controller comprising a detector of claim 6, Kulha et al. disclose the main apparatus which is provided to a structure with a lockable part having a handle and being adapted to open and close; wherein said main apparatus, when said lockable part in locked, is adapted to send by wireless transmission a specified request signal to a portable device carried by said user if a detection output of said detector is switched on with said detection area made relatively large, to receive an answer signal from said portable device in response to said request signal, and to cause said lockable part to be unlocked after ascertaining that specified conditions for unlocking are satisfied, said specified conditions including

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condition that said received answer signal be a correct signal; and wherein said main apparatus, when said lockable part is unlocked, is adapted to send by wireless transmission a specified request signal to said portable device carried by said user if a detection output of said detector is switched on with said detection area made relatively small, to receive an answer signal from said portable device in response to said request signal, and to cause said lockable structure to be locked after ascertaining that said received answer signal is a correct signal (col. 5 line 36-18). Furthermore, Heide et al. suggest the detection circuit is adapted to set the specified sampling timing of said wave detection circuit part so as to make said detection area relatively large (col. 1 lines 37-53).

Referring to claim 16, Heide et al. in view of Kulha et al. disclose a lock controller comprising a detector of claim 15, Heide et al. disclose wherein said specified conditions further include condition that said detection output be switched on with said detection area made relatively small by setting said specified sampling timing of said wave detection circuit part accordingly after said detection output becomes switched on with said sampling timing of said wave detection circuit part set so as to make said detection area relatively large (col. 1 lines 37-53).

### ***Claim Objections***

Claims 17 and 19 are objected to as being dependent upon a rejected base claim, but



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would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Referring to claim 17 and 19, the following is a statement of reasons for the indication of

allowable subject matter: the prior art fail to suggest limitations that the judging parts includes bandpass filters and said detection output is switched on only if said target object is judged to be approaching at a speed within a specified range.

***Allowable Subject Matter***

Claims 3-4, 11-14 and 18 are allowed.

Referring to claim 3, the following is a statement of reasons for the indication of allowable subject matter: the prior art fail to suggest limitations that "a correcting device for concluding that said target object is absent if the detection outputs associated with said plurality of detection areas are switched on substantially simultaneously".

Regarding claims 4 and 11-14 and 18 are allowed because the claims are dependent upon claim 3.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Okada et al. (US# 6,552,649) disclose the vehicle security system using low electromagnetic power.

Nahata et al. (US# 6,825,752) disclose a vehicle security system having a sensor for sensing the presence of objects at a predetermined distance.

Agravante et al. (US# 5,940,011) disclose a security system detecting the vehicle surrounding.

Shimonura et al. (US# 6,879,247) disclose an anti-theft device monitors an object or a person approaching a vehicle from a distance.

Geber (US# 6,700,475) discloses an electronic closure system has one or more lockable and unlockable closure units.

Baudard (US# 6,522,241) disclose an identification device for controlling locking of the opening leaves of the vehicle.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Au whose telephone number is (571) 272-3063. The examiner can normally be reached on Mon-Fri, 8:30AM – 5:00PM.

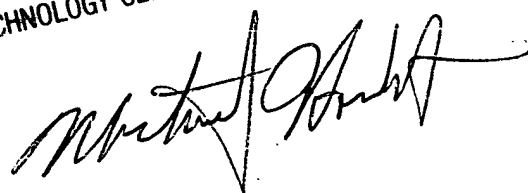
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached at (571) 272-3068. The fax phone numbers for the organization where this application or proceeding is assigned are (571)-272-1817.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-3900.

Scott Au

MICHAEL HORABIK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

A handwritten signature in black ink, appearing to read "Michael Horabik", written over the printed name and title.